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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/289,208	04/09/99	HOWLAND	C W0490/7007/R
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RANDY J PRITZKER
WOLF GREENFIELD & SACKS
600 ATLANTIC AVENUE
BOSTON MA 02210

IM22/0314

EXAMINER

GUARRIELLO, J

ART UNIT

PAPER NUMBER

1771

DATE MAILED:

03/14/01

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/289208

Applicant(s)

Howland

Examiner

John Guarriello

Group Art Unit

1771

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-9 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-9 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) #2
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

15. The examiner acknowledges the preliminary amendment of April 9, 1999.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1-4, 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harpell et al. 5,198,280.

Harpell describes three dimensional fibrous structures which are designed for penetration resistance for projectiles with a plurality of layers

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which can be aligned parallel and other layers can be rotated so that the successive layers can be at different angles of 45, or 90 degrees with the previous layer, (see abstract, column 3, lines 28-65; column 4, lines 24-68).

Harpell describes these fibers into the layers at different angles which give denier of 4000 or less and energy to break is equal to or greater than 40 joules/gram,(column 5, lines32-52). It is the examiner's position that although warp and fill are not stated the arrangement and properties evidenced by Harpell clearly approximate the properties of the claimed invention.

Harpell differs from the claimed invention because warp and fill are not stated.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fibers and layers of Harpell motivated with the expectation that the rearranging parts (layers and fibers) involves only routine skill in the art, In re Japikse, 86 USPQ 70.

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18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claim 1,5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harpell et al. 5,198,280 in view of Harpell et al. 4,403,012.

Harpell '280 as above except it is silent about the coating of the fibers for the protective substrate.

Harpell '012 describes ballistic resistant fabric article with coated fibers which coated fibers can be epoxy resins among others, (column 3, lines 44-68). '012 describes the coatings can be epoxy resins in composites or other ballistic resistant materials, (column 4, lines 15-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the fiber epoxy resin coating of '012 with

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the fibers of '280 motivated with the expectation that there would be significant improvement with the impact resistance of the protective substrate.

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

21. Claims 1-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 5,837,623. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been

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obvious to one of ordinary skill in the art at the time the invention was made to modify '623 by optimizing the layers of the warp and fill and arranging the angles of the layers such that they would provide protection from projectiles such as bullets or knives or other sharp objects since this is routine in the antiballistic garment art.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chiou et al. 6,133,169 describes penetration resistant ballistic articles to ice pick and knife.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone number is (703) 308-3209. The examiner can normally be reached on Monday to Friday from 8am to 4 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



John J. Guarriello:gj

Patent Examiner

March 10, 2001


ELIZABETH M. COLE
PRIMARY EXAMINER